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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/647,367

08/25/2003

Tsutomu Yoneyama

5405-6

2146

27799

7590

02/07/2006

COHEN, PONTANI, LIEBERMAN & PAVANE

551 FIFTH AVENUE

SUITE 1210

NEW YORK, NY 10176

EXAMINER

SHAH, MANISH S

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,367

Applicant(s)

YONEYAMA ET AL.

Examiner

Manish S. Shah

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2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13, 15 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-13 and 15 is/are allowed.
- 6) ☒ Claim(s) 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (# US 6,523,948).

Matsumoto et al. teaches:

- An ink jet recording head (23) that ejects UV curable ink.
- An UV light irradiation section for irradiating the ink (Fig. 19).
- A humidity detecting section (S2, figure: 1) for detecting the humidity around the recording medium.
- A controller (31, figure: 1) for controlling the irradiation of the UV light on the basis of the detected humidity. (See column: 12, line: 25-39, which discusses controlling output of drying units based upon humidity detected by humidity sensor, column: 13, line: 37-59, which discusses control of IR diodes based on humidity and column: 14, line: 39-56, which discusses control of UV light based on humidity.)
- The controller generates data for controlling the output of the UV lights, based upon the detected humidity. Matsumoto further discloses that the amount of irradiation

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the UV lights may be varied either by changing the intensity of the output or by changing the duty time (operation time) (column: 13, line: 51-55).

- The humidity sensor is provided at a distance capable of detecting humidity around the ink in a carrying direction of the recording medium. (Fig. 1 illustrates that the humidity sensor [S2] is disposed downstream of the print head [23])

Matsumoto teaches the claimed invention with the exception of:

- The controller controls the irradiation of the light so as to be higher in case the detected humidity is not less than predetermined humidity, and controls the irradiation of the light so as to be lower in the case the detected humidity is less than the predetermined humidity.

The meaning of the humidity is a moderate degree of wetness. So if you have more wetness obviously you need more drying time or curing time or high irradiation or high temperature to get the complete dry or complete curing.

However, Matsumoto teaches (column: 12, line: 30-40) that the controller controls the temperature according to humidity. It is obvious that if you have more humidity, you need higher irradiation or need longer time for drying or curing, and if you have less humidity, you need less irradiation or need less time for drying or curing.

Allowable Subject Matter


2. Claims 8-13 & 15 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Manish S. Shah
Primary Examiner
Art Unit 2853

MSS

2/3/06